Dataset Overview:

- Title: Renewable Energy Usage Sampled

- Source: Sampled dataset capturing renewable energy usage across various countries (from Renewable_Energy_Usage_Sampled.csv)

- Description:
This dataset contains monthly data on renewable energy usage, recorded across multiple countries and regions. It includes information on various renewable energy sources (e.g., solar, wind, hydro) along with usage metrics, dates, and geographic details. This data provides an opportunity to explore trends, compare geographic performance, and analyze the mix and growth of renewable energy usage.

Key Variables:

- Country/Region: Geographic identifier indicating where the data was recorded.

- Date/Year/Month: Temporal information capturing when the energy usage was measured.

- Energy Source: Category of renewable energy (e.g., solar, wind, hydro).

- Usage Metric: Quantitative measure of renewable energy consumption (Monthly_Usage_kWh).

1. **Trends Over Time:**

How has total renewable energy usage changed from year to year?

Visualization: Line chart displaying usage trends over time.

2. **Regional Comparison:**

Which region has the highest renewable energy usage?

Visualization: Bar chart comparing usage by region.

3. **Breakdown by Source:**

Which renewable source (e.g., solar, wind) is dominant in different regions?

Visualization: Pie chart illustrating the distribution of energy sources.

4. **Growth Rate:**

Which region has seen the fastest growth in renewable energy usage over time?

Visualization: Line chart incorporating growth rates, potentially using Level of Detail (LOD) calculations to compute yearly or monthly changes.

5.**Top N Analysis:**

Which 10 countries have the highest/lowest renewable energy usage?

Visualization: Bar chart using a set to highlight the top 10 countries, with a quick filter for further analysis.